Author Index

Aerts, C., s. Voisin, C. et al. 17

Appel, D., Shim, C.: Comparative Effect of Epinephrine and Aminophylline in the Treatment of Asthma 243

Arnoux., A., Stanislas-Leguern, G., Marsac, J., Chretien, J.: Immunocompetent Cells and Delayed Hypersensitivity Reaction in Sarcoidosis 137

Bégin, R., s. Lemaire, I. et al. 323

Bégin, R. s. Rola-Pleszczynski, M. et al. 91

Boyle, D. W., s. Boyle, J. III 255

Boyle, J. III, Mautone, A. J., Tipton, D. A., Sierns, E. J., Boyle, D. W.: The Effect of the Minimal Deflation Pressure on Lung Mechanics in Isolated Rabbit Lungs 255

Brendel, K., s. Kuttan, R. et al. 333

Chretien, J., s. Arnoux, A. et al. 137

Dalquen, P., s. Hasse, J. et al. 23 Debreczeni, L., s. Hutás, I. et al. 153 Denis, P., s. Pasquis, P. et al. 109 D'Esopo, N. D., s. Mahler, D. A. et al. 163 Duhamel, R. C., s. Kuttan, R. et al. 333

Engle, M. J., s. Perelman, R. H. et al. 53

Farrell, P. M., s. Perelman, R. H. et al. 53

Ganeshananthan, M., s. Loke, J. et al. 35 Garrard, C. S., s. Önal, E. et al. 265 Geddes, D. M., s. Pang, J. A. 231

Gelb, A. W., Southorn, P., Rehder, K.: Effect of General Anaesthesia on Respiratory Function (Review) 187

Gerstenhaber, B. J., s. Mahler, D. A. et al. 163 Gordon, W. I., s. Horsfield, K. 211

Gräzenti, J. N., Knapp, A.: Diabetic Ketoacido-

sis and Invasive Aspergillosis 43 Gross, N. J.: The Pathogenesis of Radiation-Induced Lung Damage 115

Guilleminault, C., Korobkin, R., Winkle, R.: A Review of 50 Children with Obstructive Sleep Apnea Syndrome 275

Haahtela, T., s. Mönkäre, S. et al. 145 Hadházy, P., s. Hutás, I. et al. 153 Hasse, J., Perruchoud, A., Dalquen, P., Herzog, H., Grädel, E.: Open Lung Biopsy in Diffuse Pulmonary Disease 23

Heller, W. D., s. Toomes, H. et al. 27 Hellot, M. F., s. Pasquis, P. et al. 109 Herzog, H., s. Hasse, J. et al. 23

Horsfield, K., Gordon, W. I.: Morphometry of Pulmonary Veins in Man 211

Hutás, I., Hadházy, P., Debreczeni, L., Vizi, E. S.: Relaxation of Human Isolated Bronchial Smooth Muscle. Role of Prostacyclin and Prostaglandin F₂α in Muscle Tone 153

Ikonen, M., s. Mönkäre, S. et al. 145

Jacobson, K. W., s. Tipton, W. R. et al. 199 Jaeger, M. J., s. Schlenker, E. H. 81

Jenne, J. W.: A Critique of Dosing Strategies for Beta-2 Adrenergic Agents and Theophylline

Knapp, A., s. Grizzanti, J. N. 43

(Review) 295

Korobkin, R., s. Guilleminault, C. et al. 275

Kuttan, R., Spall, R. D., Duhamel, R. C., Sipes, I. G., Meezan, E., Brendel, K.: Preparation and Composition of Alveolar Extracellular Matrix and Incorporated Basement Membrane 333

Lahoute, C., s. Voisin, C. et al. 17

Laitinen, L. A., s. Mönkäre, S. et al. 145

Lavietes, M. H., Rochester, D. F.: Assessment of Airway Function During Assisted Ventilation 219

Lebas, J., s. Voisin, C. et al. 17

Lefrancois, R., s. Pasquis, P. et al. 109

Lemaire, I., Sirois, P., Rola-Pleszczynski, M., Massé, S., Bégin, R.: Early Biochemical Reactions in the Lung of Sheep Exposed to Asbestos: Evidence for Cyclic AMP Accumulation in Bronchoalveolar Lavage Fluids 323

Loke, J., Ganeshananthan, M., Palm, C. R., Motoyama, E. K.: Site of Airway Obstruction in Asymptomatic Asthmatic Children 35

Lopata, M., s. Önal, E. et al. 265

Mahler, D. A., Gerstenhaber, B. J., D'Esopo, N. D.: Air-Fluid Levels Within Lung Bullae Associated with Pneumonitis 163

Marsac, J., s. Arnoux, A. et al. 137

Massé, S., s. Lemaire, I. et al. 323 Mautone, A. J., s. Boyle, J. III et al. 255

McFadden, E. R. Jr.: An Analysis of Exercise as a Stimulus for the Production of Airway Obstruction (Review) 3

Meezan, E., s. Kuttan, R. et al. 333

Mertens, P.: Alveolar-Arterial PCO₂ Differences and Diffusion Limitation 101 Mönkäre, S., Haahtela, T., Ikonen, M., Laitinen, L. A.: Bronchial Hyperreactivity to Inhaled Histamine in Patients with Farmer's Lung 145 Morris, H. G., s. Tipton, W. R. et al. 199 Motoyama, E. K., s. Loke, J. et al. 35

Nelson, H. S., s. Tipton, W. R. et al. 199

Önal, E., Lopata, M., Garrard, C. S.: Diaphragmatic EMG in Studies of Inspiratory "Off-Switch" Threshold in Humans 265 Ostertag, H., s. Toomes, H. et al. 27

Palm, C. R., s. Loke, J. et al. 35
Pang, J. A., Geddes, D. M.: The Biochemical
Properties of the Pulmonary Circulation (Review) 231

Pasquis, P., Denis, P., Hellot, M. F., Lefrancois, R., Vargas, E.: Influence of Hemoglobin Concentration on Lung Diffusing Capacity for CO at High Altitude 109

Perelman, R. H., Engle, M. J., Farrell, P. M.: Perspectives of Fetal Lung Development (Review) 53

Perruchoud, A., s. Hasse, J. et al. 23 Peslin, R., s. Teculescu, D. B. et al. 127 Pino, J., s. Teculescu, D. B. et al. 127

Rehder, K., s. Gelb, A. W. et al. 187
Reichel, J., s. Schechter, A. 13
Richardson, J. B.: Nonadrenergic Inhibitory Innervation of the Lung (Review) 315
Robin, H., s. Voisin, C. et al. 17
Robotham, J. L., s. Wise, R. A. et al. 175
Rochester, D. F., s. Lavietes, M. H. 219
Rola-Pleszczynski, M., Sirois, P., Bégin, R.: Cellular and Humoral Components of Bronchoalveolar Lavage in the Sheep 91
Rola-Pleszczynski, M., s. Lemaire, I. et al. 323

Schechter, A., Reichel, J.: Prolonged Survival in Bronchogenic Carcinoma Complicated by Superior Vena Cava Obstruction 13

Schlenker, E. H., Jaeger, M. J.: Airway Responsiveness of Chronic Smokers to Increased Lung Volume and to a Bronchodilator 81 Shim, C., s. Appel, D. 243
Siems, E. J., s. Boyle, J. III 255
Sipes, I. G., s. Kuttan, R. et al. 333
Sirois, P., s. Lemaire, I. et al. 323
Sirois, P., s. Rola-Pleszczynski, M. et al. 91
Souhrada, J. F., s. Tipton, W. R. et al. 199
Southorn, P., s. Gelb, A. W. at al. 187
Spall, R. D., s. Kuttan, R. et al. 333
Stanislas-Leguern, G., s. Arnoux, A. et al. 137
Summer, W. R., s. Wise, R. A. et al. 175

Teculescu, D. B., Pino, J., Peslin, R.: Composite Flow-Volume Curves Matched at Total Lung Capacity in the Study of Density Dependence of Maximal Expiratory Flows 127

Tipton, D. A., s. Boyle, J. III 255
Tipton, W. R., Nelson, H. S., Souhrada, J. F., Morris, H. G., Jacobson, K. W.: Dynamics of Isoproterenol Subsensitivity in Guinea Pig Airway Smooth Muscle. Comparison of Tissue cAMP Levels and Airway Smooth Muscle Relaxation 199

Tonnel, A. B., s. Voisin, C. et al. 17
Toomes, H., Vogt-Moykopf, I., Heller, W. D.,
Ostertag, H.: Measurement of Mucociliary
Clearance in Smokers and Non-smokers
Using a Bronchoscopic Video-Technical
Method 27

Vargas, E., s. Pasquis, P. et al. 109
Vizi, E. S., s. Hutás, I. et al. 153
Vogt-Moykopf, I., s. Toomes, H. et al. 27
Voisin, C., Tonnel, A. B., Lahoute, C., Robin, H.,
Lebas, J., Aerts, C.: Bird Fancier's Lung:
Studies of Broncho-Alveolar Lavage and
Correlations with Inhalation Provocation
Tests 17

Williams, M. H. Jr.: Editorial 1
Williams, M. H. Jr.: Why Do the Airways Contain Smooth Muscle? (Editorial) 291
Winkle, R., s. Guilleminault, C. et al. 275
Wise, R. A., Robotham, J. L., Summer, W. R.: Effects of Spontaneo

Title and Key-Word Index

Note: Book reviews are listed below under the heading "Books"

(a-A)PCO₂ 187 (A-a)PO₂ 187

Air-Fluid Levels Within Lung Bullae Associated with Pneumonitis. D. A. Mahler, B. J. Gerstenhaber, N. D. D'Esopo 163

Airway function 220 - obstruction 3

- resistance 220

- Responsiveness of Chronic Smokers to Increased Lung Volume and to a Bronchodilator. E. H. Schlenker, M. J. Jaeger 81

Air vs helium breathing 127

Altitude 109

Alveolar-Arterial PCO2 Differences and Diffusion Limitation. P. Mertens 101

Alveolar basement membrane 333

extracellular matrix 333

Aminophylline 243

An Analysis of Exercise as a Stimulus for the Production of Airway Obstruction (Review). E. R. McFadden Jr. 3

Asbestos 323

Aspergillosis 43

Assessment of Airway Function During Assisted Ventilation. M. H. Lavietes, D. F. Rochester 219

Asthma 3, 35

- treatment 243

Beta adrenergic agonists 199

The Biochemical Properties of the Pulmonary Circulation (Review). J. A. Pang, D. M. Geddes 231

Bird Fancier's Lung: Studies of Broncho-Alveolar Lavage and Correlations with Inhalation Provocation Tests. C. Voisin, A. B. Tonnel, C. Lahoute, H. Robin, J. Lebas, C. Aerts 17

Books

- Airway Reactivity. F. E. Hargreave, ed. (reviewed by M. H. Williams, Jr.) 289

- Asthma. H. Herzog, ed. (reviewed by M. H. Williams, Jr.) 288

- Biochemistry of Normal and Pathological Connective Tissues. A. M. Robert, L. Robert, eds. (reviewed by R. G. Crystal) 114

- Breathing, Speech and Song. D. F. Proctor (reviewed by M. H. Williams, Jr.) 50

 Coccidioidomycosis: A Text. D. A. Stevens, ed. (reviewed by H. Abeles) 173

- Diagnostic Techniques in Pulmonary Disease, part I. M. A. Sackner, ed. (reviewed by M. H. Williams, Jr.) 173

- Diagnostic Techniques in Pulmonary Disease, part II. M. A. Sackner, ed. (reviewed by M. H. Williams, Jr.) 348

- Disorder of the Respiratory System, 2nd edn. G. Cumming, S. J. Semple. (reviewed by J. Reichel) 346

- Pulmonary Circulation in Health and Disease, G. Cumming, G. Bonsignore, eds (reviewed by M. H. Williams, Jr.). 174

- Pulmonary Disease Review, vol. 1. R. C. Bone, ed. (reviewed by A. Schechter) 347

- Pulmonary Embolism. J. Widimsky, ed. (reviewed by M. H. Williams, Jr.) 49

- Pulmonary Embolism. W. G. Wolfe, D. C. Sabiston, Jr. (reviewed by M. H. Williams, Jr.) 113

- Regulation of Breathing, T. F. Hornbein, ed. (reviewed by M. H. Williams, Jr.) 290

- The Chest. R. Des Prez, ed. (reviewed by M. H. Williams, Jr.) 347

Bronchial Hyperreactivity to Inhaled Histamine in Patients with Farmer's Lung. S. Mönkäre, T. Haahtela, M. Ikonen, L. A. Laitinen 145

Bronchial muscle 153

— reactivity 145 Bronchoalveolar lavage 17, 91, 323

Bronchodilator 81

Bullae 163

Carbon dioxide 101

Cardio-vascular change 275

Cellular and Humoral Components of Bronchoalveolar Lavage in the Sheep. M. Rola-Pleszczynski, P. Sirois, R. Bégin 91

Chest wall 187

Children 275

Circulating substances 231

Clinical implications 231

Comparative Effect of Epinephrine and Aminophylline in the Treatment of Asthma. D. Appel, C. Shim 243

Compliance 255

Composite Flow-Volume Curves Matched at Total Lung Capacity in the Study of Density Dependence of Maximal Expiratory Flows. D. B. Teculescu, J. Pino, R. Peslin 127

CO₂ rebreathing 265

A Critique of Dosing Strategies for Beta-2 Adrenergic Agents and Theophylline (Review). J. W. Jenne 295

Cyclic AMP 323 - nucleotides 199

Diabetes 43

Diabetic Ketoacidosis and Invasive Aspergillosis. J. N. Grizzanti, A. Knapp 43

Diaphragmatic EMG in Studies of Inspiratory "Off-Switch" Threshold in Humans. E. Önal. M. Lopata, C. S. Garrard 265

Diffusing capacity 109

Diffusion 101

Dynamics of Isoproterenol Subsensitivity in Guinea Pig Airway Smooth Muscle. Comparison of Tissue cAMP Levels and Airway Smooth Muscle Relaxation. W. R. Tipton, H. S. Nelson, J. F. Souhrada, H. G. Morris, K. W. Jacobson 199

Early Biochemical Reactions in the Lung of Sheep Exposed to Asbestos: Evidence for Cyclic AMP Accumulation in Bronchoalveolar Lavage Fluids. I. Lemaire, P. Sirois, M. Rola-Pleszczynski, S. Massé, R. Bégin 323

Effect of General Anaesthesia on Respiratory Function (Review). A. W. Gelb, P. Southorn, K. Rehder 187

Effects of Spontaneous Ventilation on the Circulation (Review). R. A. Wise, J. L. Robotham. W. R. Summer 175

The Effect of the Minimal Deflation Pressure on Lung Mechanics in Isolated Rabbit Lungs. J. Boyle III, A. J. Mautone, D. A. Tipton, E. J. Siems, D. W. Boyle 255

Endothelium 231 Epinephrine 243 Exercise 3

Farmer's lung 145 Fetus 53 FRC 187

Hemoglobin 109 Highland natives 109 Histamine 153 Hypersensitivity pneumonitis 17

Immunocompetent Cells and Delayed Hypersensitivity Reaction in Sarcoidosis. A. Arnoux, G. Stanislas-Lequern, J. Marsac, J. Chretien 137

Immunodeficiency 43 Indicator wash-out 255

Influence of Hemoglobin Concentration on Lung Diffusing Capacity for CO at High Alti-

tude. P. Pasquis, P. Denis, M. F. Hellot, R. Lefrançois, E. Vargas 109 Inhalation provocation test 17 Inspiratory "off-switch" threshold 265 - time 265 Intrapulmonary shunt 187

Lung 53, 101

basement membrane 333

— biopsy 23

- collagen 333

- compliance 187

- defense 91

extracellular matrix 333

- innervation 315 - volume 81

Lymphocytes 137

Matching of air and helium curves 127

Mathematical model 101

Maximal expiratory flow 127

Measurement of Mucociliary Clearance in Smokers and Non-smokers Using a Bronchoscopic Video-Technical Method. H. Toomes, I. Vogt-Moykopf, W. D. Heller, H. Ostertag 27

Monocytes 137

Morphometry of Pulmonary Veins in Man. K. Horsfield, W. I. Gordon 211 Mucociliary clearance 27

Nonadrenergic inhibition 315

 Inhibitory Innervation of the Lung (Review). J. B. Richardson 315

Non-smokers 27

Opening pressures 255 Editorial. M. H. Williams Jr. 1 Open Lung Biopsy in Diffuse Pulmonary Disease. J. Hasse, A. Perruchoud, P. Dalquen, H. Herzog, E. Grädel 23

The Pathogenesis of Radiation-Induced Lung Damage. N. J. Gross 115

Perspectives of Fetal Lung Development (Review), R. H. Perelman, M. J. Engle, P. M. Farrell 53

PGF_{2n} 153

Phosphatidylcholine 53 Phase difference (PD) 81

Pneumonitis 163

Preparation and Composition of Alveolar Extracellular Matrix and Incorporated Basement Membrane. R. Kuttan, R. D. Spall, R. C. Duhamel, I. G. Sipes, E. Meezan 333

Prolonged Survival in Bronchogenic Carcinoma Complicated by Superior Vena Cava Obstruction. A. Schecter, J. Reichel 13

Prostacyclin 153
Pulmonary circulation 211
— insufficiency 23
— veins 211
Pulsus paradoxus 175
P-V Relationships of lung 255

Relaxation of Human Isolated Bronchial Smooth Muscle. Role of Prostacyclin and Prostaglandin $F_{2\alpha}$ in Muscle Tone. I. Hutás, P. Hadházy, L. Debreczeni, E. S. Vizi 153 Regulation of respiration 265 Respiratory distress syndrome 53 — failure 220

— heat loss 3

A Review of 50 Children with Obstructive Sleep Apnea Syndrome. C. Guilleminault, R. Ko-

robkin, R. Winkle 275

Sarcoidosis 137 Sheen 323

Sheep 323 — lungs 91 Site of Airway Obstruction in Asymptomatic Asthmatic Children. J. Loke, M. Ganeshananthan, C. R. Palm, E. K. Motoyama 35 Sleep 275

— apnea syndrome 275 Smokers 27

Smoking 81 Subsensitivity 199

Superior vena cava obstruction, survival 13 Superior vena cava obstruction, treatment 13 Surfactant 53

Time constant of lung 255 Tracheal smooth muscle 199 Tuberculin anergy 137

Ventilation and circulation 175 Ventilatory control 187 Video technical method 27 V/Q 187

Why Do the Airways Contain Smooth Muscle? M. H. Williams Jr. 291